ICHTHYOLOGY.—*A new species of cichlid fish of the genus* Petenia *from Colombia.*[1]

LEONARD P. SCHULTZ, U. S. National Museum.

Recently, while studying the cichlid fishes of Venezuela and attempting to identify other specimens from South America in the collections of the U. S. National Museum that had never been identified or reported upon, I came across two fishes that appear to belong to a new species of the genus *Petenia*. A few years ago Dr. George S. Myers, when in charge of the fish collections in the National Museum, had examined these two specimens and noted that they seemed to represent a new species, but he did not work up a description or separate it from other members of the genus. In view of Dr. Myers's preliminary notation, I take great pleasure in naming this new species in his honor.

Genus **Petenia** Günther

Petenia Günther, Catalogue of the fishes in the British Museum **4**: 301. 1862. (Genotype: *Petenia splendida* Günther.)

Petenia myersi, n. sp.

Holotype.—U.S.N.M. no. 120533, a specimen 137 mm in standard length, collected by Brother Nicéforo María, in the Río Dedo, tributary of the Río Orteguaza, near Florencia (Amazon system), Colombia.

Paratype.—U.S.N.M. no. 120534, a specimen 65 mm in standard length with same data. This fish is in poor condition, with injured snout, and was preserved in a hunchback position. Measurements, therefore, may not be very reliable, although I tried to straighten the specimen.

Description.—Measurements are expressed in hundredths of the standard length, first for the holotype, then for the paratype in parentheses. Standard length in mm 137 (65).

Length of head 37.9 (40.0); greatest depth of body 43.1 (46.9); length of snout 14.6 (13.1); diameter of eye 8.61 (11.5); width of interorbital space 10.2 (9.23); least width of preorbital 4.89 (4.62); postorbital length of head 15.7 (16.9); snout tip to rear end of maxillary 24.1 (– –); snout to nostril 10.9 – –); eye to nostril 3.65 (3.08); length of caudal peduncle 17.7 (14.2); least depth of caudal peduncle 14.2 (13.8); length of fifth dorsal spine 12.4 (16.5); length of last dorsal spine 12.4 (– –); longest ray of pelvics 31.0 (31.5); longest ray of pectorals 21.5 (24.9); distance out from base that caudal fin is scaled 13.9 (11.5); longest caudal fin ray 25.5 (26.2).

The following counts were made, respectively: Dorsal rays XV,13 (XV,13); anal rays V,9 (V,9); pectoral rays 15-15 (15-15); pelvic rays, I,5-I,5 (I,5-I,5); branched caudal fin rays 14 (14); scale rows below lateral line 32 (32); scales from dorsal origin to lateral line 6 (6); scales from pelvic base to lateral line 12 (12); pores in lateral line 18+13 (18+11); scales from base of last dorsal spine to lateral line and on base of dorsal 5+2 (5+2); zigzag row of scales around caudal peduncle 20 (20).

Body compressed, greatest depth at origin of dorsal fin $2\frac{1}{2}$ in standard length; caudal peduncle a little longer than deep; head $2\frac{3}{4}$ in standard length; eye 1.9 in snout and $4\frac{1}{2}$ times in head; interorbital equal to snout tip to nostril and $3\frac{3}{4}$ in head; snout tip to rear of maxillary 1.6 in head, maxillary curving downward to under middle of eye; premaxillary greatly protractile, the premaxillary process reaching to a vertical through middle of operculum; gill rakers short, stubby, about 1+9; teeth in a villiform band on both jaws, the outer rows enlarged, curved, conical, caninelike teeth and widely spaced, largest forward; upper and lower lips fleshy, continuous around the end of the jaw without a frenum; scales large, ctenoid, forward on top of head to middle of interorbital space; cheeks and operculum scaled, except the preopercular edge posteriorly, which is naked; spinous dorsal with a row of scales at its base posteriorly, then several rows of scales on soft dorsal, mostly on membranes between the rays; base of anal fin similarly scaled; caudal fin scaled out for half its length; soft rays of vertical fins prolonged; soft rays of pelvic fins filamentous and extending to opposite base of first few anal spines; pectoral fin rounded, reaching just past the middle black vertical bar; nostril twice nearer eye than tip of snout.

Color (in alcohol).—Light brownish, darker above, paler ventrally; a black vertical bar beginning at dorsal origin, passing through eye, thence downward just behind maxillary to un-

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TABLE 1.—FIN-RAY COUNTS RECORDED FOR THE SPECIES OF PETENIA

Species	Dorsal							Anal					
	Spines			soft				Spines			soft		
	XV	XVI	XVII	10	11	12	13	V	VI	VII	8	9	10
splendida....	x[1]	x	—	—	—	x	x	x	x	—	x	x	x
spectabilis...	x	—	—	—	—	x	x	—	x	—	—	x	x
kraussii.....	4	15	1	4	16	—	—	—	19	1	5	14	1
myersi.....	2	—	—	—	—	—	2	2	—	—	—	2	—

[1] x means that counts were taken from the literature.

derside of head; brownish area on back below front of spinous dorsal fading at lateral line; then a second vertical dark brownish bar from bases of seventh to tenth dorsal spines downward across middle of body to a little in front of anus; third vertical bar extending downward from front of soft dorsal and fourth at and a little behind rear of soft dorsal; fifth bar occurring at rear of caudal peduncle, narrowly separated from a dark bar at base of caudal fin; a more or less indistinct and broken lateral band from behind eye to caudal peduncle on the holotype but lacking on the paratype; pelvics blackish; other fins appearing to be plain in color at the present time.

Remarks.—The members of the genus *Petenia* may be recognized by the combination of the following characters: Premaxillary extremely protractile, with the ascending process reaching from behind the orbits to a vertical line through middle of operculum, this premaxillary process nearly as long as length of head; lips thick, fleshy, without a frenum; maxillary much exposed, only partly slipping under preorbital, and extending to a vertical line through middle of eye; in the outer row teeth enlarged, curved, conical, and widely spaced, followed by a band of villiform teeth inside; lateral line interrupted, continuing on middle of caudal peduncle; the upper lateral line separated from base of dorsal fin by 4 or more full-sized scales; lateral line scales same size as those above and below; gill rakers short, thick, about 9 or 10 on lower part of first arch; preorbital narrower than diameter of eye; nostril closer to eye than tip of snout; bases of soft

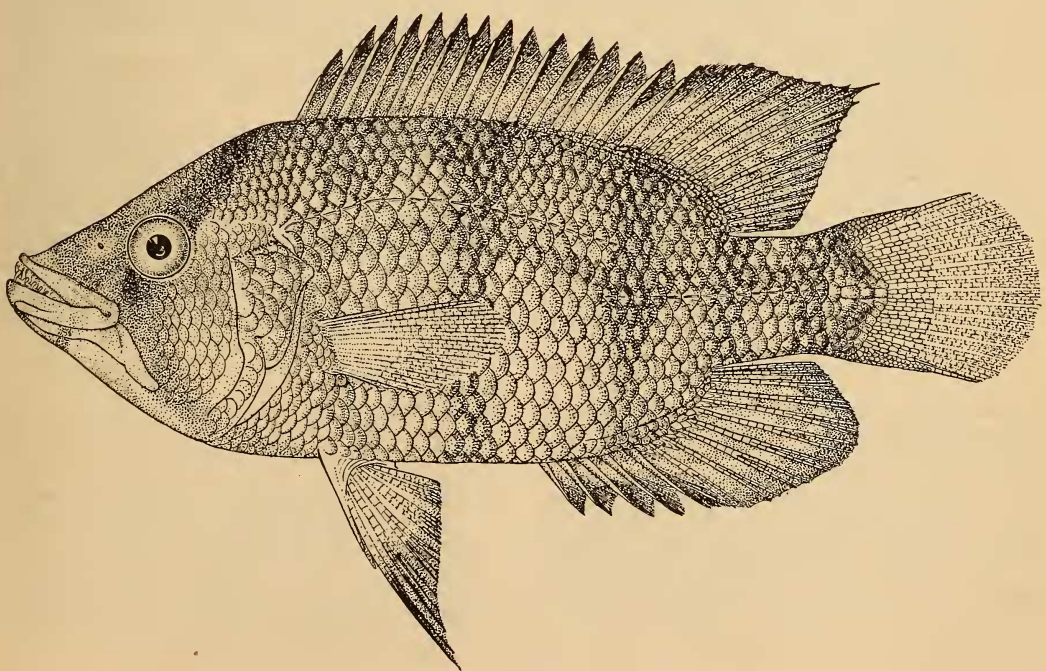

FIG. 1.—*Petenia myersi*, n. sp.: Holotype (U.S.N.M. No. 120533). Drawn by Mrs. Aime N. Awl.

rays of median fins scaled; gill membranes joined but forming a wide, free fold across isthmus; scales ctenoid; dorsal rays XV or XVI, rarely XVII, 10 to 13; anal V or VI (rarely VII), 8 to 10. See Table 1 for counts made on the species of *Petenia*.

This new species may be distinguished from all others referred to the genus *Petenia* by the following key:

1*a*. Pores in lateral line 18 to 21+15 to 20; 6 to 8 black blotches along midaxis, first on opercle, then 5 or 6 on midaxis of body, the last an ocellated spot on base of upper rays of caudal fin; head and median fins black spotted; scale formula—6 from dorsal origin to lateral line, 38 to 41 from upper opercular opening to midcaudal fin base below lateral line, and 15 to 20 from pelvic origin to lateral line; dorsal rays XV or XVI, 12 or 13; anal V or VI, 8 to 10; head $2\frac{1}{2}$ to 3, depth $2\frac{1}{2}$ to $2\frac{2}{3}$ in standard length ..... *Petenia splendida* Günther[2]

1*b*. Pores in lateral line 18 to 20+9 to 13; scale formula—5 or 6+29 to 32+11 to 13; color pattern of blackish vertical bars or not more than 3 black blotches along midaxis; head $2\frac{1}{3}$ to $2\frac{2}{3}$ in standard length.

2*a*. Three black blotches along midaxis, the first on opercle, sometimes joining with a black blotch on shoulder at beginning of lateral line, the second in middle of length below lateral line, the third an ocellated spot on base of upper caudal fin rays; no black vertical bar through eye; distance from rear base of anal fin to midcaudal fin base 1.1 or 1.2 in least depth of caudal peduncle; depth $2\frac{1}{3}$ to $2\frac{3}{4}$ in standard length.

3*a*. Greatest depth $2\frac{1}{3}$ to $2\frac{3}{4}$ in standard length; last dorsal spine $2\frac{2}{5}$ to $2\frac{3}{5}$ in head; opercular and shoulder spots usually prominent on adults, less so or absent on young; about 6 usually double darkish vertical bars on body and vertical fins somewhat black spotted; dorsal rays XV or XVI, 10 or 11; anal VI, rarely VII, 8 or 9; scales 6+29 to 30+11 to 13; pores in lateral line 19 or 20+9 to 11 ..... *Petenia kraussii* Steindachner[3]

3*b*. Greatest depth 2 in standard length; last dorsal spine $2\frac{3}{10}$ in head; shoulder spot and opercular spot absent; vertical fins not spotted; vertical dark bars lacking; dorsal rays XV, 12 or 13; anal rays VI, 9 or 10; scales 5 or 6+30+11 or 12; pores in lateral line 19 or 20+11 to 13 ..... *Petenia spectabilis* (Steindachner)[4]

2*b*. No ocellate black spot on caudal fin base; a blackish bar from dorsal origin through eye to underside of head; a second blackish bar from middle of base of spinous dorsal to belly in front of anus, a third one from front of soft dorsal, one or two more bars on caudal peduncle, and another blackish bar on base of caudal fin; pelvics black; vertical fins probably black spotted; no black blotches along midaxis of body, as in 2*a*; a more or less indistinct darkish lateral streak along midaxis on adult, absent on small specimen; length of caudal peduncle about 0.8 or 0.9 in its least depth or longer than deep: least depth $2\frac{1}{5}$ to $2\frac{2}{5}$ in standard length; dorsal rays XV, 13; anal rays V, 9; scales 6+32+12; lateral line pores 18 or 19+11 to 13 ..... *Petenia myersi*, n. sp.

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[2] I have observed the following references to this species: *Petenia splendida* Günther, Cat. Fishes Brit. Mus. **4**: 301. 1862 (Lake Petén).—Eigenmann and Bray, Ann. New York Acad. Sci. **7**: 615. 1894 (Lake Petén).—Regan, Ann. Mag. Nat. Hist. (ser. 7) **16**: 433. 1905 (Lake Petén).—Regan, Biologia Centrali-Americana, Pisces: 29. 1908 (Lake Petén).—Pellegrin, Mem. Soc. Zool. France **16**: 243. 1903 (Lake Petén; Bélize).

[3] I have noticed the following references to this species:

Petenia kraussii Steindachner, Denkschr. Akad. Wiss. Wien **39**: 28, pl. 2, fig. 1, a–b. 1878 (Río Magdalena); **42**: 56. 1879 (Río Cauca); **72**: 130. 1902 (Río Lebrija, trib. Río Magdalena at Santander).—Eigenmann and Bray, Ann. New York Acad. Sci. **7**: 615, 1894 (Río Magdalena).—Pellegrin, Mem. Soc. Zool. France **16**: 244, 1903 (Maracaibo; Río Magdalena).

Cichlosoma kraussi, Regan, Ann. Mag. Nat. Hist. (ser. 7) **16**: 339, 1905 (Baranquilla, Colombia; Venezuela).

Cichlasoma kraussii, Eigenmann, Mem. Carnegie Mus. 9 (1): 207. 1922 (Magdalena and Atrato Basins).—Myers, Stanford Ichthy. Bull. **2** (4): 114. 1942 (Quebrada Sargento, trib. Río Limón, north of Maracaibo, Venezuela).

Astronotus (*Petenia*) *kraussi*, Eigenmann and Eigenmann, Proc. U. S. Nat. Mus. **14**: 69. 1891 (Magdalena system).

In addition, I collected this species in 17 localities in the Maracaibo Basin of Venezuela during 1942.

[4] I have noticed the following references to this species:

Acara (*Petenia*) *spectabilis* Steindachner, Sitzb. Akad. Wiss. Wien **71**: 36, pl. 4. 1875 (Amazon River at Gurupa and Obidos).

Petenia spectabilis Eigenmann and Bray, Ann. New York Acad. Sci. **7**: 615, 1894 (Amazon near Gurupa and Obidos).—Pellegrin, Mem. Zool. Soc. France **16**: 244. 1903 (Pará).

Cichlosoma spectabile, Regan, Ann. Mag. Nat. Hist. (ser. 7) **16**: 339. 1905 (Río Amazon).

Astronotus (*Petenia*) *spectabilis* Eigenmann and Eigenmann, Proc. U. S. Nat. Mus. **14**: 69. 1891 (Gurupa; Obidos).